AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method of communicating video from a sender to a receiver over a network comprising:

receiving a frame;

accessing information that characterizes a first path in the network and information that characterizes a second path in the network that includes a relay device not on the first path;

determining if the frame is from a first sub-sequence of frames;

when the frame is from the first sub-sequence of frames, encoding the frame using video encoding parameters that are selected according to the information that characterizes the first path, packetizing the frame into at least a packet, and sending the packet via the ~~a~~ first path ~~in the network~~; and

otherwise, when the frame is from a second sub-sequence of frames and not from the first sub-sequence of frames, encoding the frame using video encoding parameters that are selected according to the information that characterizes the second path, packetizing the frame into at least a packet, and sending the packet via the a second path ~~in the network that includes a relay device not on the first path~~.

2. (Previously Presented) The method of claim 1 wherein the first sub-sequence and the second sub-sequence are selected based on time or space.

3. (Previously Presented) The method of claim 1 wherein the step of determining if the frame is from a first sub-sequence of frames includes determining if the frame is an odd frame or an even frame.

4. (Previously Presented) The method of claim 1 wherein the packet includes a label for identifying whether the packet is part of the first sub-sequence or part of the second sub-sequence.

5. (Previously Presented) The method of claim 1 further comprising:

determining if a packet is from the first sub-sequence;

when the packet is from the first sub-sequence, decoding the packet;

determining if there is an error in the packet;

when there is an error, determining if a reduced frame rate is acceptable;

when the reduced frame rate is acceptable, displaying the video at the ~~a~~ reduced frame rate by employing frames from the second sub-sequence;

when the reduced frame rate is not acceptable, performing state recovery on the frame by employing one of a previous frame and a future frame from one of the first sub-sequence and the second sub-sequence.

6. (Previously Presented) The method of claim 1 further comprising:

determining if the packet is from the first sub-sequence;

when the packet is from the first sub-sequence, decoding the packet;

determining if there is an error in the packet;

when there is an error, performing state recovery on the frame by employing one of a previous frame and a future frame from one of the first sub-sequence and the second sub-sequence.

7. (Previously Presented) The method of claim 6 wherein the step of performing state recovery on the frame by employing one of a previous frame and a future frame from one of the first sub-sequence and the second sub-sequence includes:

estimating a lost frame;

employing an estimate of the lost frame in future decoding; and

displaying the estimate of the lost frame.

8. (Currently Amended) A system of communicating video from a sender to a receiver over a network comprising:

a separator for receiving a first frame with a sub-sequence identifier field and specifying the sub-sequence identifier field of the first frame with one of a first sub-sequence identifier and of a second sub-sequence identifier based on a predetermined criteria;

an encoder coupled to the separator for encoding the first frame, wherein the encoder accesses information that characterizes a first path in the network and information that characterizes a second path in the network that includes a relay device not on the first path; and

a transmitter for selecting a path from ~~transmitting the first frame via~~ one of the ~~a~~ first path and the ~~a~~ second path based on the sub-sequence identifier field, wherein the encoder uses video encoding parameters to encode the first frame, the video encoding parameters selected according to the information that characterizes the path selected. [[,]] ~~wherein the first path comprises a relay device and the second path does not include the relay device of the first path.~~

9. (Original) The system of claim 8 further comprising:

a receiver for receiving the first frame;

a decoder coupled to the receiver for decoding the first frame and

determining if there is an error in the first frame; and

a state recovery unit coupled to the decoder for performing state recovery on the first frame by employing one of a previous frame and a future frame when there is an error.

10. (Original) The system of claim 8 further comprising:

a sender for estimating the quality of the state recovery by employing multiple states and comparing a recovered corrupted stream with a known correctly received stream.

11. (Previously Presented) The method of claim 1 further comprising:

receiving at least one path quality parameter; and

in response to the path quality parameter dynamically modifying at least one video encoding parameter.

12. (Previously Presented) The method of claim 11 wherein the path quality parameter is provided through a feedback link with the receiver.

13. (Previously Presented) The method of claim 11 wherein the video encoding parameter includes quantization, frame rate, and spatial resolution of the encoding.

14. (Previously Presented) The method of claim 11 further comprising:

receiving the at least one path quality parameter; and

in response to the path quality parameter dynamically modifying at least one communication parameter.

15. (Previously Presented) The method of claim 14 wherein the communication parameter includes number of paths and path configuration.

16. (Previously Presented) The method of claim 14 wherein the path quality parameter includes bandwidth, packet loss rate, delay, and quality of service.

17. (Previously Presented) The method of claim 15 wherein the number of paths is dynamically modified to be one path.

18. (Currently Amended) A method for communicating an original series of video frames over a network comprising;

receiving the original series of video frames;

separating the original series of video frames into odd video frames and even video frames;

encoding the odd video frames to encoded odd video frames;

encoding the even video frames to encoded even video frames; wherein the encoded odd video frames and the encoded even video frames are independently decodable;

transmitting the encoded odd video frames by employing a first path over the network, wherein relay devices on the first path are explicitly specified prior to the transmitting of the encoded odd video frames; and

transmitting the encoded even video frames by employing a second path over the network, wherein relay devices on the second path are explicitly specified prior to the transmitting of the encoded even video frames, the second path comprising a relay device that is not on the first path.

19. (Original) The method of claim 18 further comprising:

receiving the encoded odd video frames;

receiving the encoded even video frames;

decoding the encoded odd video frames to generate re-constructed odd video frames;

decoding the encoded even video frames to generate re-constructed even video frames; and

merging the re-constructed odd video frames and re-constructed even video frames to recover the original video frames.

20. (Original) The method of claim 18 further comprising:

receiving the encoded odd video frames;

receiving the encoded even video frames;

merging the encoded odd video frames and encoded even video frames to generate a composite series of encoded frames; and

decoding the series of composite encoded video frames to recover the original video frames.